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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,096	04/05/2001	Biing-Seng Wu	4006-117	2725

7590

12/19/2002

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EXAMINER

PATEL, NITIN

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/826,096

Applicant(s)

WU ET AL.

Examiner

Nitin Patel

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hebiguchi in view of Ozawa et al., (U.S. Patent No. 6,462,724).

As per claims 1,4,5,7,8,9,10,12 Hebiguchi shows a scan line includes TFT disposed in an array, each array element having a TFT and a plurality of perpendicular scan line and data line (In col.4 lines 50-60) connecting to a gate and source of a TFT; a gate voltage deformation (resistor R40 In Fig.3) which connects between the gate of the first TFT and a input terminal of the scan line to deform the gate input voltage waveform connected to the scan line circuit (In Col.7 lines 40-45).

Hebiguchi does not show the drain of the TFT connecting to a liquid capacitor and a storage capacitor. Ozawa shows the drain of the TFT connecting to a liquid with ITO thin film and resistor with TFT source/gate connection (In Col.4 lines 40-49 and In fig.13) which capacitor and a storage capacitor (In Fig.13 and In col.28 lines 18-250. It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to allow the teaching of storage and crystal capacitors of Ozawa's into the TFT-LCD device of Hebiguchi's because it would have applied the data in On/Off mode of a scanning mode and display mode.

As per claims 2,11 Hebiguchi shows the gate deformation device comprises a resistor (In fig.3 and In col.7 lines 38-40).

As per claim 3, the resistance of the resistor is in the range of 10 to 100 ohm 9In col.7 lines 51-59).

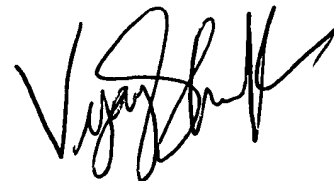
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 703-308-7024. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9052 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9618.

NP  
December 12, 2002



**VIJAY SHANKAR**  
**PRIMARY EXAMINER**